



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

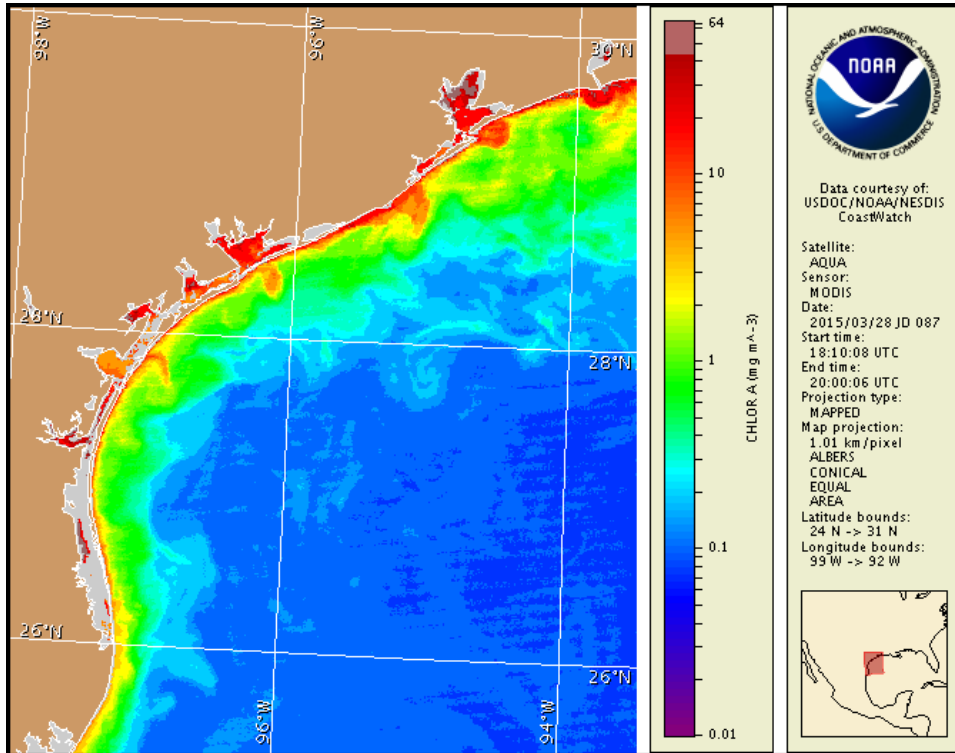
Monday, 30 March 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, March 23, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from March 20 to 27: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

*Karenia brevis* (commonly known as Texas red tide) ranges from not present to very low concentrations along the coast of Texas. No respiratory irritation is expected alongshore Texas Monday, March 30 through Monday, April 6.

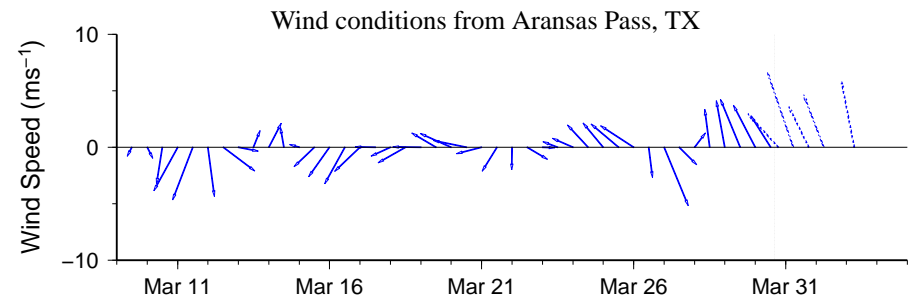
## Analysis

Sampling from Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, continues to indicate that *Karenia brevis* concentrations range between 'not present' and 'very low a' (TAMU; 3/23-30). For information on area shell-fish restrictions, contact the Texas Department of State Health Services.

In recent MODIS Aqua imagery (3/28, shown left) patches of high to very high chlorophyll (10 to >20  $\mu\text{g/L}$ ) are visible along- and offshore the Texas coast from Sabine Pass to Port Aransas. Elevated chlorophyll (2-10  $\mu\text{g/L}$ ) is visible stretching along- and off-shore from Port Aransas to the Rio Grande. Elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 20 km north from the Port Aransas region from March 28 to April 2.

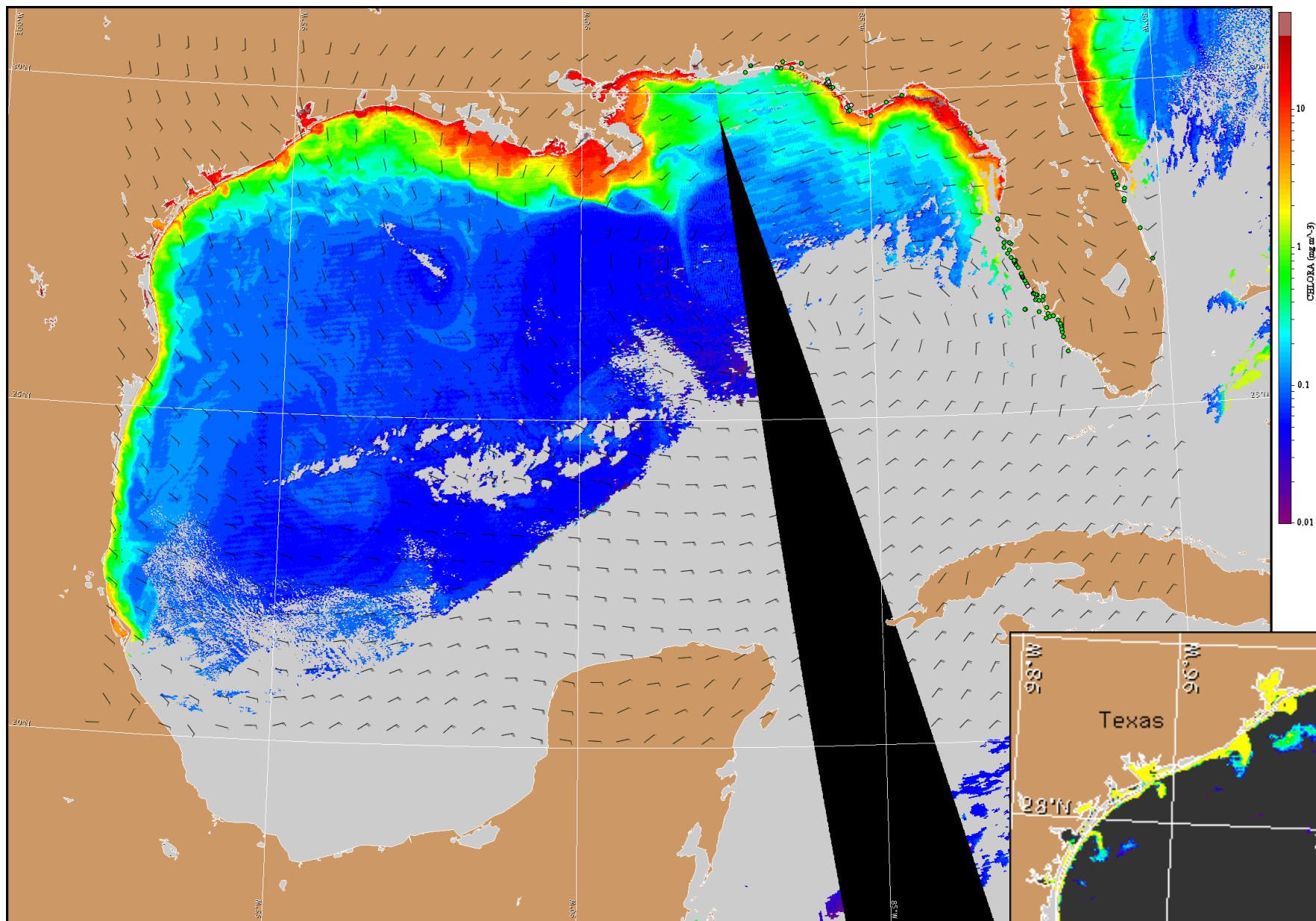
Keeney, Yang, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

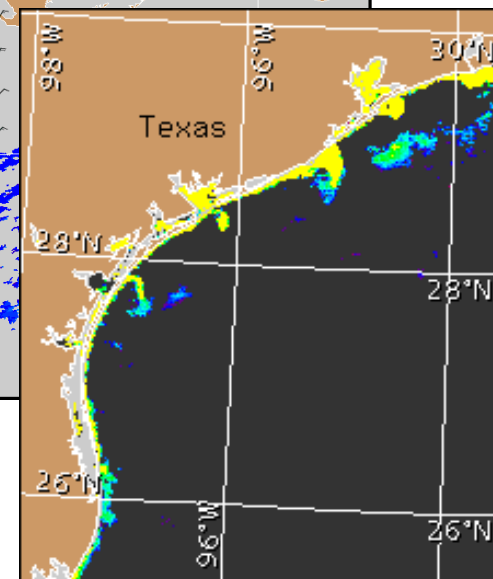
## Wind Analysis

**Port Aransas:** South to southeast winds (10-15kn, 5-8m/s) today through Friday. East winds (10-15kn) Friday night



Satellite chlorophyll image and forecast winds for March 31, 2015 06Z with points representing cell concentration sampling data from March 20 to 27: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).